

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) In a bolt-together trailer frame having a plurality of frame members bolted together, wherein the improvement comprises:

at least two axle frame members, each axle frame member having at least one axle cut-out in a lower portion thereof;

at least one cut-out reinforcing member proximate the at least one axle cut-out; and

at least one axle member, the at least one axle member comprising one of: at least one torsion axle integral with two cut-out reinforcing members; and at least one sprung axle unit,

each sprung axle unit comprising: a plurality of spring hangers attached to the at least one axle frame member; leaf springs attached to the spring hangers; and an axle attached to the leaf springs.

2. (Original) The improvement according to claim 1, wherein the at least one axle member is a sprung axle unit, the number of sprung axle units is two, the number of axle cut-outs is four, the leaf springs comprise four sets of leaf springs, and the spring hangers comprise four end spring hangers and two pivotable equalizer spring hangers, each set of leaf springs being attached to one end spring hanger and one pivotable equalizer spring hanger, a pivotable equalizer spring hanger being positioned between two end spring hangers.

3. (Original) The improvement according to claim 2, wherein the number of axle frame members is four, two axle frame members being bolted to one another, and further comprising: at least one connector reinforcing member attached to each of the two bolted together axle frame members,

each pivotable equalizer being attached to one of the at least one connector reinforcing members.

4. (Original) The improvement according to claim 1, further comprising:
a plurality of cross supports attached to and extending laterally from the at least two axle frame members.
5. (Original) The improvement according to claim 4, wherein the laterally extending cross supports extend to and are attached to a corresponding laterally spaced axle frame member.
6. (Original) The improvement according to claim 4, wherein the laterally extending cross supports extend part way towards a corresponding laterally spaced axle frame member.
7. (Original) The improvement according to claim 6, wherein the laterally extending cross supports are adapted to be connected to a floor.
8. (Original) The improvement according to claim 1, wherein the at least one axle member is a torsion axle, the number of axle cut-outs is four and the number of torsion axles is two.
9. (Original) The improvement according to claim 1, wherein the number of axle frame members is four, two axle frame members being bolted to one another, and further comprising:
at least one connector reinforcing member attached to each of the two bolted together axle frame members.
10. (Original) The improvement according to claim 9, wherein the number of connector reinforcing members being attached to each of the two bolted together axle frame members is two, one of the at least one connector reinforcing members being attached to an outside surface of the bolted together axle frame members and one of the at least one connector reinforcing members being attached to an inside surface of the bolted together axle frame members.

11. (Original) The improvement according to claim 1, wherein the at least one axle member is a sprung axle unit and, further comprising: a spring hanger reinforcement gusset attached to the axle frame member between the axle frame member and the spring hanger.
12. (Original) The improvement according to claim 1, further comprising:
a laterally extending flange about at least a portion of the axle cut-out.
13. (Original) The improvement according to claim 12, wherein the axle cut-out includes a top portion distal a lower edge of the axle frame member, the laterally extending flange being positioned about the top portion.
14. (Original) The improvement according to claim 1, wherein the axle frame member includes a plurality of dimples about the axle cut-out and the cut-out reinforcing member includes a corresponding plurality of dimples, the axle frame member dimples being in nested engagement with the cut-out reinforcing member dimples.
15. (Original) The improvement according to claim 14, wherein at least one of the cut-out reinforcing member dimples has an aperture therethrough and at least one of the axle frame member dimples has an aperture therethrough; and, further comprising:
a threaded fastener extending through the apertures fastening the axle frame member and the cut-out reinforcing member together.
16. (Original) The improvement according to claim 1, wherein the cut-out reinforcing member is a plate positioned about the at least one axle cut-out.
17. (Original) The improvement according to claim 16, wherein the plate has a cut-out corresponding to the axle cut-out.

18. (Original) The improvement according to claim 1, wherein the cut-out reinforcing member is a longitudinally extending stiffener plate attached to the axle frame member.

19. (Original) In a bolt-together trailer frame having a plurality of frame members bolted together, wherein the improvement comprises:

at least two axle frame members, each axle frame member having at least one axle cut-out in a lower portion thereof, a laterally extending flange about at least a portion of the axle cut-out, a plurality of through apertures about the axle cut-out, a dimple positioned about at least one of the through apertures;

at least one cut-out reinforcing member about the at least one axle cut-out and fastened to an axle frame member, the cut-out reinforcing member having a plurality of apertures therein and a dimple positioned about at least one of the axle cut-out apertures, the cut-out reinforcing member dimples being in nested engagement with the axle cut-out dimples; and

at least one axle member attached to the axle frame members.

20. (Original) The improvement according to claim 19, wherein the at least one axle member is at least one torsion axle, each torsion axle being integral with two cut-out reinforcing members.

21. (Original) (Original) The improvement according to claim 20, wherein each torsion axle is welded to the two cut-out reinforcing members.

22 (Original). The improvement according to claim 19, wherein the at least one axle member is at least one sprung axle unit, each sprung axle unit comprising: a plurality of spring hangers attached to the at least one axle frame member; leaf springs attached to the spring hangers; and an axle attached to the leaf springs.

23. (Original) A method of assembling a bolt-together trailer frame comprising:
providing a plurality of frame members including at least two axle frame members, each axle frame member having at least one axle cut-out therein;
selecting at least one axle member to fit the intended use of the bolt-together trailer frame, the selection being one of: a torsion axle and a sprung axle;
fastening the plurality of frame members together with a plurality of threaded connectors;
fastening an axle cut-out reinforcing member about each axle cut-out; and
attaching at least one axle member to the axle frame members.
24. (Original) The method according to claim 23, wherein the at least one axle member is a torsion axle; and further comprising:
welding the torsion axle to the axle cut-out reinforcing member.
25. (Original) The method according to claim 23, wherein the at least one axle member is a sprung axle unit comprising: a plurality of spring hangers, leaf springs and an axle and further comprising:
attaching the spring hangers to the axle frame members;
attaching the leaf springs to the spring hangers; and
attaching the axle to the leaf springs.
26. (Original) The method according to claim 25, further comprising:
fastening a plurality of transversally extending cross-support members with threaded connectors to the axle frame members.
27. (Original) The method according to claim 23, wherein the axle member has a plurality of dimples therein and the cut-out reinforcing member has a plurality dimples therein, and further comprising:
prior to the step of attaching the cut-out reinforcing member to the axle member, nesting the cut-out reinforcing member dimples and the axle member dimples together.

28. (Original) The method according to claim 23, further comprising:
providing an external reinforcing connector;
providing an internal reinforcing connector;
positioning two axle frame members end to end;
positioning the external reinforcing connector across the ends of both axle frame members on an external surface of the axle frame members;
positioning the internal reinforcing connector across the ends of both axle frame members on an internal surface of the axle frame members; and
fastening the external reinforcing connector, the internal reinforcing connector and the two axle frame members together with threaded fasteners.
29. (Cancelled)
30. (Previously Presented) A bolt-together trailer frame comprising:
a plurality of frame members connected together by a plurality of fasteners to form a trailer frame,
the plurality of frame members including at least two axle frame members adapted to be connected to either a torsion axle or a sprung axle, wherein the adaptation of the at least one axle frame member includes each axle frame having at least one axle cut-out therein; and at least one cut-out reinforcing member about the at least one axle cut-out, the cut-out reinforcing member being threadedly connected to the axle frame member.
31. (Original) The bolt-together trailer frame according to claim 30, wherein the adaptation of the at least one axle frame members further includes a laterally inwardly extending flange about at least a portion of the axle cut-out.
32. (Original) The bolt-together trailer frame according to claim 30, wherein the cut-out reinforcing member is a plate positioned about the at least one axle cut-out.

33. (Original) The bolt-together trailer frame according to claim 32, wherein the plate has a cut-out corresponding to the axle cut-out.

34. (Original) The bolt-together trailer frame according to claim 30, wherein the cut-out reinforcing plate is a longitudinally extending stiffener plate attached to the axle frame member.

35. (Original) In a bolt-together trailer frame having a plurality of frame members bolted together, wherein the improvement comprises:

at least two axle frame members, each axle frame member having at least one axle cut-out in a lower portion thereof;

at least one cut-out reinforcing member attached to each axle frame member with threaded fasteners about the at least one axle cut-out; and

at least one axle member attached to the at least two axle frame members with threaded fasteners.

36. (Original) The improvement according to claim 35, wherein the at least one axle member is a torsion axle integral with two cut-out reinforcing members.

37. (Original) The improvement according to claim 35, wherein the at least one axle member is a sprung axle unit, the sprung axle unit comprising: a plurality of spring hangers attached to the at least one axle frame member; leaf springs attached to the spring hangers; and an axle attached to the leaf springs.

38. – 43 (Cancelled)

44. (Previously Presented) The improvement according to claim 1, wherein the at least one axle member is a sprung axle unit; and further comprising:

a sprung axle support box connected to the at least two axle frame members, the sprung axle support box comprising: each axle frame member having a longitudinally extending stiffener plate attached thereto proximate the at least one axle cut-out; and two cross members connectedly attached to at least two axle frame members, each cross member being attached proximate an end of the stiffener plate;

45. (Previously Presented) The bolt-together trailer frame according to claim 44, wherein each stiffener plate is welded to an axle frame member.

46. (Previously Presented) The bolt-together trailer frame according to claim 44, wherein each axle frame member has a vertically extending side portion and a top portion extending at a 90° angle away from a top edge of the side portion.

47. (Previously Presented) The bolt-together trailer frame according to claim 46, wherein each stiffener plate has a vertically extending side portion and top and bottom portions extending at a 90° angle away from top and bottom edges of the side portion, the top and bottom portions extending in the same direction whereby the top, bottom and side portions form a C shape, the stiffener plate top and bottom portions extending towards an adjacent axle frame member side portion thereby forming an enclosed space having a top, bottom and two sides.

48. (Previously Presented) The bolt-together trailer frame according to claim 47, wherein the vertical height of the axle frame member side portion is greater than the vertical height of the stiffener plate side portion.

49. (Previously Presented) The bolt-together trailer frame according to claim 47, wherein the spring hangers are attached to the stiffener plate bottom portion.